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A Little Knowledge Is a Dangerous Thing . . . Emerging Miranda Research and Professional Roles for Psychologists

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In Miranda v. Arizona (1966), the 20th century's most prominent and consequential legal decision on constitutionally guaranteed rights against compelled self-incrimination, the Supreme Court of the United States mandated the delivery of specific warnings to persons facing custodial interrogation. Owing in large part to popularization of these warnings by the entertainment media, many citizens can recite at least some of their Miranda rights in rote fashion; however, recent and

emerging research provides compelling evidence of persistent Miranda misconceptions and fallacies among criminal suspects and the lay public. The effects of these misunderstandings are profound. Conservatively, an estimated 318,000 suspects waive their rights annually while failing to comprehend even 50% of representative Miranda warnings. Two major issues, oral advisements and juvenile warnings, are examined in relationship to Miranda comprehension. Professional roles for psychologists are explored for Miranda issues that incorporate education, community consultation, forensic practice, and applied research.

Keywords: Miranda, confessions, forensic evaluations, self-incrimination

Countless television images of police interrogations create a popularized though inaccurate view of Miranda rights. Most Americans can recite a familiar litany of Miranda-type statements beginning with "You have the right to remain silent." Most Americans self-assuredly "know" their Miranda rights and, though law-abiding, are confident in their abilities to apply them if subjected to arrest and preinterrogation.

Borrowed from a familiar misquote of a line from Alexander Pope's (1711/1996) *Essay on Criticism*, the warning about the dangers of a little knowledge referred to in the title of this article is especially apt when considering constitutional protections against self-incrimination and their expressions in the form of Miranda rights and warnings. Belief in this little knowledge is as strong in the conviction with which it is held as it is weak in factuality. Thus, the danger of a little knowledge often arises from the unquestioned certitude of the belief in its veridicality.

The dangers of a little knowledge are explored at multiple levels throughout this article. Suspects in custody must consider, even if momentarily, their knowledge of their Miranda rights before making what may be their most consequential postarrest decision. Often unaware of the farreaching consequences of doing so, suspects relinquish their rights to counsel and opt to participate in custodial interrogations that eventuate in their confession, "the single most influential factor" resulting in their conviction and subsequent incarceration (Oberlander, Goldstein, & Goldstein, 2003, p. 335). Officers of the courts, especially defense attorneys, operate from their own limited knowledge base in deciding when, if ever, to raise issues regarding the invalidity of Miranda waivers. Psychologists and psychiatrists rely on methods yielding limited relevant knowledge in evaluating Miranda waivers.

Background on the Miranda Decision

Ernesto Arturo Miranda, the son of a Mexican immigrant, was arrested in 1963 for the possible kidnapping and rape of an 18-year-old girl. Although described as intellectually limited, his victim provided a detailed description of him

including his ethnicity, approximate age, observable tattoos, and dark-rimmed glasses, but she later became vague in her recall of the assailant (Lief & Caldwell, 2006). Despite Miranda's distinctive features (eyeglasses and a noticeable tattoo), in only a four-person lineup, he was still not identified as the perpetrator. Nonetheless, the police lied to him about the positive identification, and he readily confessed to his involvement (Cassell, 1996). It is interesting that two court-appointed psychiatric experts saw Miranda as being disturbed and as having impaired reasoning and judgment (Baker, 1983).

The Supreme Court made its landmark ruling in a 5–4 decision on June 13, 1966. The majority opinion by Chief Justice Warren relied on the 5th Amendment right against self-incrimination and required that custodial suspects be given the following protections in the form of Miranda rights:

Procedural safeguards must be employed to protect the privilege, and unless other fully effective means are adopted to notify the person of his right of silence and to assure that the exercise of the right will be scrupulously honored, the following measures are required. He must be warned prior to any questioning that he has the right to remain silent, that anything he says can be used against him in a court of law, that he has the right to the presence of an attorney, and that if he cannot afford an attorney one will be appointed for him prior to any questioning if he so desires. Opportunity to exercise these rights must be afforded to him throughout the interrogation. (*Miranda v. Arizona*, 1966, pp. 478–479)

The Miranda warning is composed of five separate but related prongs (Rogers & Shuman, 2005). First, the "right to silence," often misunderstood as simply a choice, refers to a constitutional protection against self-incrimination (i.e., the suspect's silence cannot be introduced as evidence). Second, the perils of waiving the right to silence are presented. The next two prongs address the right to counsel prior to the interrogation and the provision of free legal services to indigent suspects. The final prong, included in most jurisdictions, affirms the ongoing nature of Miranda rights that can be invoked at any time during or after the interrogation.

Editor's Note

Richard Rogers received the Award for Distinguished Professional Contributions to Applied Research. Award winners are invited to deliver an award address at the APA's annual convention. A version of this award address was delivered at the 116th annual meeting, held August 14–17, 2008, in Boston, Massachusetts. Articles based on award addresses are reviewed, but they differ from unsolicited articles in that they are expressions of the winners' reflections on their work and their views of the field.

The Miranda warning was not intended to be comprehensive. While mentioning the risks of waiving the right to silence, it provides no parallel information about the right to counsel. However, the *Miranda* decision specifies advantages of counsel and the concomitant risks of waiving this right. Besides protections against self-incrimination, the presence of counsel during the interrogation reduces "the likelihood that the police will practice coercion" and helps to ensure that any statement by the accused is "rightly reported by the prosecution at trial" (*Miranda v. Arizona*, 1966, p. 470). ¹

The decision did not specify the language of the Miranda warning and even left open the possibility that another alternative (i.e., "other fully effective means") could be substituted. Since the original decision, the Supreme Court has declined to further clarify the Miranda wording. Directly on point in California v. Prysock (1981), the Court rejected a defendant's argument that a warning must use the exact language of Miranda; it ruled that "no talismanic incantation was required to satisfy its strictures" (p. 359). Despite decisions limiting their applicability (see Stuntz, 2001), Miranda warnings remain a fundamental component of criminal justice. The Court even rejected a congressional attempt to repeal Miranda. In Dickerson v. United States (2000, p. 443), it concluded, "Miranda has become embedded in routine police practice to the point where the warnings have become part of our national culture."

Comprehension and Knowledge of Miranda Warnings

Early Miranda research typically assumed that Miranda warnings were generally uniform across the United States. For example, Grisso (1981, p. 49) used only one Miranda warning based on the following rationale: "To the best of our knowledge, the wordings which we used are employed identically or with slight variations in most other jurisdictions." Miranda research for the next two decades implicitly assumed the general uniformity of Miranda warnings. While acknowledging interjurisdictional differences in the complexity of language, a recent review (Oberlander & Goldstein, 2001, p. 458) still provided broad generalizations about "most jurisdictions."

The seminal article by Greenfield, Dougherty, Jackson, Podboy, and Zimmermann (2001) questioned the uniformity of Miranda warnings and showed that there were 21 different Miranda versions used in New Jersey counties alone. As evidence of their remarkable heterogeneity, their reading levels varied from 4th grade to the 2nd year in college. This article was soon followed with valuable data from Helms (2003) focusing on state and federal jurisdictions. For the state police alone, at least 31 variations were observed. Federal jurisdictions varied widely in the reading levels of their Miranda warnings, which ranged from Grade 5.4 for the Drug Enforcement

Administration to Grade 9.9 for the Bureau of Alcohol, Tobacco, Firearms and Explosives.

Two large-scale surveys I and my colleagues (Rogers, Harrison, Shuman, Sewell, & Hazelwood, 2007; Rogers, Hazelwood, Harrison, Sewell, & Shuman, 2008) conducted underscore the dangers of assuming the uniformity of Miranda warnings across American jurisdictions. Together, these surveys yielded 945 distinct Miranda warnings from 638 jurisdictions that were augmented by research on 122 juvenile English warnings (Rogers, Hazelwood, et al., in press) and 121 general Spanish warnings (Rogers, Correa, et al., in press). The next section provides important insights into Miranda knowledge and practice.

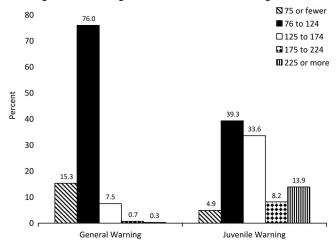
Variations in Miranda Length

Emerging research confutes popular misconceptions about Miranda warnings, including the persistent fiction of uniformity. The most basic metric of Miranda warnings is word length. Although most advisements include the warning itself, a waiver, and additional material, the analysis in this article is intentionally conservative, using only the Miranda warnings themselves. The problems with length and complexity are multiplied when statements about the Miranda waiver and additional material are also considered.

The heterogeneity of the Miranda warning word lengths is extraordinary. General English Miranda warnings range from 21 to 408 words with an average of 95.60 words. As summarized in Figure 1, relatively brief warnings (≤ 75 words) occur infrequently but are clearly achievable. Most fall in the second category (76 to 124 words), but almost one tenth exceed these numbers. One option in considering these lengths is to rely on Miller's (1956) classic work on the magic number (7 ± 2) for information processing. With verbal chunking, the upper limit of information processing for Miranda warnings is likely less than 75 words (Rogers, Harrison, Shuman, et al., 2007). An alternative approach is to examine normative data on verbal recall. Using the standardization sample for the Memory Assessment Scales, Williams (1991) evaluated verbal recall via the Immediate Prose Recall scale. Even when cued, participants with less than a 12th grade education recalled only 55.8% of the verbal material. Neither approach is a close match to Miranda information processing because (a) some Miranda material was previously learned or mislearned; (b) many suspects have cognitive deficits and are further impaired by highly stressful cir-

¹ Relevant to this point, the Supreme Court's observation suggests that one of the arresting officers may have been deceptive in his testimony: "At the robbery trial, one officer testified that during the interrogation he did not tell Miranda that anything he said would be held against him or that he could consult with an attorney. The other officer stated that *they had both told Miranda* that anything he said would be used against him and that he was not required by law to tell them anything" (emphasis added; *Miranda v. Arizona*, 1966, p. 492, footnote 67).

Figure 1 Average Word Lengths for Miranda Warnings



cumstances; and (c) the mere recitation of concepts cannot be equated with genuine understanding.

The effects of word length on Miranda warning comprehension have not been systematically investigated. An early effort by Ferguson and Douglas (1970) to come up with a "simplified" Miranda warning backfired when several Miranda components were included in a 32-word sentence, although reading difficulty probably also contributed to poor comprehension.

Juvenile Miranda warnings are often designed to provide youths in custody with more detailed information than is provided by the warnings typically used with adults. An unintentional consequence is a marked expansion in word length. On average, juvenile Miranda warnings are close to 150 words in length (M=147.70; range =52-526), with nearly one fourth exceeding 175 words (see Figure 1). The result constitutes an overburdening of juveniles with extensive verbal material in a well-intentioned but misguided effort to produce better understanding.

Variations in Miranda Reading Levels

Remarkable differences in reading levels are observed across Miranda warnings/waivers. The widely accepted Flesch-Kincaid reading levels estimate minimal grade levels for comprehension of 75% or more of the reading material (DuBay, 2004). Only 20.9% of the general English warnings are written below a sixth grade level (see Figure 2). Most warnings require a sixth to eighth grade reading level, which exceeds the literacy of many inmates because 70% function at or below the sixth grade level (Haigler, Harlow, O'Connor, & Campbell, 1992). At the other end of the spectrum, 2.2% of the warnings require at least some college education. While this percentage may seem trivial, it potentially affects thousands of custodial suspects each year.

A critical but overlooked issue is within-warning variations of Miranda warnings. On average, individual components vary by more than six grade levels. Most difficult is Free Legal Services (Component 4), which typically requires a 10th grade reading level. Without question, simple reliance on overall averages may obscure important withinwarning variations.

Juvenile Miranda warnings are slightly more demanding than their general counterparts (Kahn, Zapf, & Cooper, 2006). Rogers, Hazelwood, et al. (in press) observed a striking difference for Component 4. About one third of juvenile warnings require a reading level in the 11th to 12th grade range, whereas an additional 10.7% necessitate reading at a college level. In 45.1% of the jurisdictions, younger juvenile offenders (e.g., less than 15 years old) could not be expected to have adequate comprehension of Component 4 even if they read *above* their expected grade levels.

I studied the ability of recently arrested adult detainees to accurately paraphrase representative Miranda warnings at different reading levels (Rogers, 2008). Their task was made easier because the material was paraphrased after each Miranda component rather than after the entire Miranda warning was presented. Good comprehension (≥ 70%) was difficult to achieve: Only 38.5% of detainees achieved good comprehension for the easy (< sixth grade) level, and substantially fewer (20.5%) achieved good comprehension for the moderate (8th to 10th grade) level. Detainees had the greatest difficulty with Miranda Components 4 (free legal services) and 5 (continuing legal rights). For example, very few detainees (6.8%) accurately recalled even at the easy (< sixth grade) level that there is no cost for a court-appointed attorney.

Figure 2Average Reading Levels for Miranda Warnings

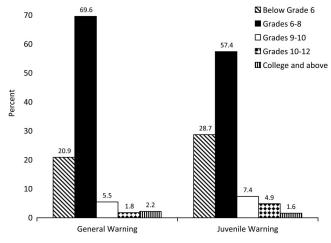


Table 1Differences in Percentages of Failed Miranda Warnings (<50% Correct) for Recently Arrested and General Detainees on Oral and Written Warnings

	Samples					
	Recently Arrested (RA)		General (G)		χ^2 differences	
Flesch–Kincaid Reading Level	Oral (O)	Written (W)	Oral (O)	Written (W)	O v. W	RA v. G
Very easy (< Grade 6)	7.7	2.6	0.0	1.1	1.49	7.87**
Easy (Grades 6 to 7.9) Moderate (Grades 8 to 9.9)	6.8 25.6	3.4 6.0	4.3 6.5	2.2 4.3	1.98 14.22***	0.89 12.95***
Difficult (Grades 10 to 11.9) Very difficult (≥ Grade 12.0)	15.4 27.4	11.1 9.4	6.5 12.9	3.2 9.7	1.95 10.76**	9.52** 4.83*

Note. Recently arrested sample = 117 detainees from a county jail in northern Texas who were typically evaluated within 18–24 hours of arrest and detention; general sample = 93 detainees from several county jails in northern Oklahoma who were in detention for 1 week or more. O v. W = chi-square differences between oral and written warnings across samples; RA v. G = differences between samples (recently arrested and general) across the types of administration (oral and written). $^*p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Oral Versus Written Miranda Warnings

Miranda warnings may be presented in oral or written formats (Rogers & Shuman, 2005). In surveying 631 police investigators, Kassin et al. (2007) found 67% of the warnings they gave were oral, 29% were written, and 4% were taped warnings. A close reading of case law suggests that oral advisements might be preferable to written warnings for defendants with limited reading ability (Rogers, Shuman, & Drogin, in press). However, emerging research sheds new light on oral Miranda warnings.

I recently examined the capacity of pretrial jail detainees to comprehend representative Miranda warnings (Rogers, 2008). Paraphrases were designated as *failed warnings* when < 50% of the content was correct. Although each component of the Miranda warnings is crucial, missing more than 50% of the warning obviously denotes severely impaired comprehension.

Oral comprehension is affected by the familiarity with the material, sentence complexity, and vocabulary (e.g., polysemous words and legal terminology). Persons with below average verbal abilities show marked deficits in recalling infrequently used words (Engle, Nations, & Cantor, 1990). As a convenient metric, I used reading levels to categorize Miranda warnings for a comparison of oral and written advisements (see Table 1). Both the immediacy of arrest and oral presentation significantly affected comprehension at the moderate and very difficult levels. As an overall trend, oral advisements failed to be comprehended much more frequently than their written counterparts by recently arrested detainees. Averaging reading levels, comprehension failures were more than double for oral (16.6%) than for written (6.5%) presentations. Use of oral advisements may strongly disadvantage suspects' ability to comprehend the basic concepts of Miranda warnings. The level of comprehension for failed warnings was generally catastrophic, with approximately 62% of the warning being inaccurate (Rogers, 2008).

Self-Appraisals of Miranda Knowledge

Custodial suspects are asked in 84.6% of jurisdictions whether they understand their Miranda warnings and waivers (Rogers, 2008). In subsequent Miranda suppression hearings, affirmative responses (e.g., "I understand") are often considered conclusive evidence of accurate understanding (*United States v. Banks*, 1996). Moreover, the Supreme Court in *North Carolina v. Butler* (1979) considered the act of signing a Miranda waiver by itself to be "usually strong proof of the validity of that waiver." An implicit assumption is that suspects have accurate meta-knowledge; the courts assume that suspects have accurate insight into their knowledge. However, nominal responses (i.e., "yes") at the time of Miranda waivers cannot be equated with accurate comprehension (Shuy, 1997).²

Interestingly, the Supreme Court in *Miranda* recognized the fundamental problems of using self-appraisals as a proxy for knowing and intelligent waivers. In light of *Escobedo v. Illinois* (1964), Miranda's confession included "a typed paragraph stating that the confession was made voluntarily, without threats or promises of immunity and 'with full knowledge of my legal rights, understanding any statement I make may be used against me'" (*Miranda v. Arizona*, 1966, p. 492). As the Court concluded (p. 492), "The mere fact that he signed a statement which contained a typed-in clause stating that he had 'full knowledge' of his

² An important but entirely separate issue is the evaluation of postconfession claims of misunderstanding. Although some detainees may feign impairment of Miranda comprehension and reasoning, their actions do not invalidate these enduring problems with self-appraisals.

'legal rights' does not approach the knowing and intelligent waiver required to relinquish constitutional rights."

To stray from *Miranda* cases for a moment, the Supreme Court has been strongly critical of unsubstantiated opinions. Ipse dixit evidence occurs when the courts are asked to accept a conclusion based solely on an individual's say-so (Gutheil & Bursztajn, 2003). The Supreme Court has repeatedly rejected ipse dixit evidence when proffered by experts with considerable training and experience (*General Electric Co. v. Joiner*, 1997; *Kumho Tire Co., Ltd. v. Carmichael*, 1999). Untrained custodial suspects cannot be expected to make legal conclusions regarding case-law interpretations of terms such as *knowingly* and *intelligently*. Their conclusions about the validity of their Miranda waivers with reference to these terms appear to epitomize ipse dixit evidence.

Legal research from eyewitness studies consistently demonstrates a widespread overconfidence in self-appraised knowledge and accuracy (Bornstein & Zickafoose, 1999; Kassin, Tubb, Hosch, & Memon, 2001). Although repeated experiences of being given Miranda warnings can build confidence, this confidence may be unrelated to accurate understanding. With mentally disordered defendants, Rogers, Harrison, Hazelwood, and Sewell (2007) found that detainees with the poorest comprehension (M = 23.7% of the material) had extensive exposure to Miranda warnings, with an average of 10.52 prior arrests.

I also examined whether college students espousing knowledge of their Miranda rights were accurate in their self-appraisals (Rogers, 2008). Nearly all (95.6%) believed that any confession would nullify their right to counsel. Appreciable percentages did not even understand the basic risks of interrogation, believing they could always talk "off the record" (35.6%) or invalidate confessions by declining to sign them (24.1%). Self-appraisals, even in the more educated sector of society, provide little assurance of accurate understanding.

Custodial suspects may also pretend to have an accurate understanding of Miranda rights. Many suspects are unlikely to admit ignorance and confusion when faced with uncomprehended statements. As noted by Weiss (2003, p. 456), no suspect "wants to look stupid"; pretending to understand Miranda warnings is often a form of impression management. Studied mostly in suspects with limited intelligence, acquiescence commonly occurs when individuals lack understanding and agree ("go along") with the interviewers (Finlay & Lyons, 2001). Suspects with limited intelligence frequently rely on cues from the police investigators on how they "should" respond (Fulero & Everington, 2004). In light of impression management and acquiescence, the Court's assumption that waivers are "knowledgeable" should be rigorously evaluated on a case-by-case basis.

Professional Knowledge and Professional Roles

Quoted correctly, Alexander Pope's (1711/1996, p. 6) *Essay on Criticism* warned that "a little learning is a dang'rous thing." Through a classical allusion to the Pierian Spring, he cautioned that a smattering of superficial learning can "intoxicate the brain," whereas extensive learning provides a sobering reality. Regarding Miranda rights and waivers, we see both levels: the passions for ill-informed views and serious, sobering knowledge.

Psychologists can engage in diverse professional roles as they relate to Miranda warnings, rights, and waivers. This section examines four professional roles: educators, community consultants, practitioners, and researchers. Only the circumscribed role of practitioner requires sophisticated forensic expertise. Otherwise, all psychologists are asked to play a role in deepening our knowledge and understanding with regard to Miranda issues.

Education on Miranda Issues

Psychologists educate both within and beyond classrooms. Miranda issues are eminently suitable for both venues. They provide an important and integrative topic that bridges such diverse domains as cognitive, clinical, social, and forensic psychology. Directly and indirectly, they are relevant at both individual and societal levels.

Public and professional students must be informed regarding the magnitude of the Miranda issues. For educational purposes, let us make three very conservative assumptions to illustrate the importance and prevalence of "knowing" waivers. First, assume that Miranda knowledge as low as 50% should be considered "adequate" comprehension. Second, assume that no difficult Miranda warnings (i.e., 10th grade level or above) are ever used. Third, assume that all suspects (100%) receiving audiotaped and videotaped versions of Miranda warnings had adequate comprehension.

What would be your professional estimate of the annual rate of failed Miranda knowledge using these very conservative assumptions: 1,000, 10,000, 100,000? A lower-bound estimate is that 318,000 custodial suspects participate annually in police interrogations without a *knowing* waiver of their constitutional protections. According to data from four jails, 46.7% of suspects given Miranda warnings talk with investigators without the benefit of counsel (Rogers, 2008). The above estimate is based on (a) Kassin et al. (2007) percentages (i.e., 67% oral, 29% written, and 4% taped), (b) 14.3 million arrests (Federal Bureau of Investigation, 2007), and (c) percentages from Table 1 and Figure 2. It is very con-

servative because of the above assumptions,³ and it does not address those suspects with knowing but not intelligent waivers.

Intelligent waivers are predicated on an adequate knowledge of Miranda warnings. In *Iowa v. Tovar* (2004, p. 1387), the Supreme Court held that an intelligent waiver necessitates that the defendant "knows what he is doing and his choice is made with eyes open." A reasoned choice cannot be made without some basic awareness of the alternatives and their potential consequences (Rogers & Shuman, 2005). For purposes of discussion, Rogers (2008) adopted a conservative standard for intelligent Miranda waivers: Could detainees generate nonpsychotic reasons for waiving or exercising their Miranda rights? One third of recently arrested detainees with adequate Miranda comprehension failed this minimal standard for an intelligent waiver. Added to the knowing prong, the overall estimate of invalid Miranda waivers exceeds 1 million suspects. Undoubtedly, Miranda-waiver issues overshadow all other criminal forensic referrals combined.

Miranda education can serve to address strongly held but ill-informed views. A researcher was told by a deputy sheriff that she had "blood on her hands" merely by participating in data collection. In contrast, many sheriffs' departments were very welcoming of Miranda research. Education about Miranda issues must grapple with a popular misconception that Miranda warnings advocate for criminals and detract from law enforcement. An early and angry reaction was that Miranda rights "handcuff the police and allow violent criminals to go free" (Payne, Time, & Gainey, 2006, p. 654). Subsequently, this emotionally reactive view has been successfully challenged by empirical data. Payne and Time (2000) found that the majority of Virginia police chiefs approved of Miranda warnings because they protect the practices of law enforcement as well as the rights of suspects. A follow-up study by Payne et al. (2006) yielded important insights. Most police chiefs believe (a) the public has a misguided understanding of Miranda warnings and (b) Miranda warnings have not stopped many criminals from confessing.

Zalman and Smith (2007) surveyed the views of executive-level police toward Miranda warnings for sample jurisdictions across the United States. Most police administrators did not believe that their jobs were made difficult (85.4%) or that voluntary confessions were hindered (73.8%) by Miranda warnings. Moreover, nearly all disagreed (90.8%) with the notion that offenders were getting off easy as a result of Miranda warnings. Overall, these survey data of law enforcement provide strong support for the following conclusion: Miranda warnings can protect suspects' rights without impeding police investigations.

Education about Miranda issues can also help professionals and the public to think critically. McCann (1998) made the trenchant observation that custodial suspects with compromised abilities to effectuate a valid waiver also carried a sub-

stantial risk of providing unreliable evidence. As noted by Kassin (2005), false confessions led to erroneous convictions in approximately 25% of DNA exonerations. How are the interests of justice served by punishing the wrong person? How are the rights of the victim and future victims served by allowing the actual criminal to go unapprehended? However diverse our views may be regarding various aspects of law and order, Miranda issues largely transcend ideology.⁴

Community Consultation on Miranda Issues

Every law enforcement agency in every jurisdiction is entitled to write its own Miranda warning. Although efforts are underway to develop and test simplified Miranda warnings, there are immediate needs in many communities to eliminate the "worst offenders," specifically, incomprehensible Miranda warnings. Psychologists are urged to play an advocacy role at the grass-roots level in using their professional knowledge for the betterment of individuals and society and for protecting legal and human rights (American Psychological Association, 2002).

An immediate goal is the elimination of abstruse and unduly complex warnings. Psychologists can advocate for simple but sweeping changes in Miranda warnings and waivers. The comprehension of Miranda warnings could be improved today by simply removing those variations that are incomprehensible to most custodial suspects:

- 1. General Miranda warnings that require at least a 10th grade education;
- 2. Juvenile Miranda warnings that require at least an 8th grade education;
- 3. Miranda warnings that exceed 125 words;
- 4. Miranda warnings that include legalistic phrases (e.g., "withdraw your waiver"); and
- 5. Miranda warnings with defective content.

The first three criteria can be easily and objectively applied to Miranda warnings. As summarized in Figure 1, more than 10% of the juvenile Miranda warnings exceed 225 words, with the average for this category being 294.18 words. Especially when presented orally, the likelihood of adequate comprehension is hypothesized to approach zero. These numbers substantially underestimate the amount of verbal material presented; the inclusion of juvenile waivers adds an average of 57.19 additional words (Rogers, Hazelwood, et al., in press).

In advocating for change at the community level, rigorous testing of each Miranda warning is not feasible. The

³ The Supreme Court (*Miranda v. Arizona*, 1966, p. 471) recognized that those suspects waiving their rights are likely to have compromised abilities: "The defendant who does not ask for counsel is the very defendant who most needs counsel." The current estimates do not take this observation into account.

⁴ According to Stuart (2004), several justices originally opposing Miranda subsequently modified their opinions in light of the empirical evidence.

goal at this stage is the elimination of the "worst offenders," those that are likely to be incomprehensible to almost all offenders. Many professionals are likely to take issue with such nonstringent guidelines for length and reading levels. Obviously, many offenders will still have problems understanding material of shorter length and lower reading levels. My thinking is pragmatic. By focusing only on the extreme Miranda versions, I hope to reduce controversy and facilitate change. Even these lax guidelines will have a profound effect on Miranda warnings. Adhering to only the first three criteria will eliminate 11.8% of the general and 66.4% of the juvenile Miranda warnings.

Psychologists consulting at the community level may be concerned that their efforts will be interpreted as "defense-oriented." In this regard, the data from police chiefs may be very helpful in demonstrating law enforcement's positive views of Miranda as well as their acknowledgement that these warnings are often misunderstood by the public. In addition, proactive change (i.e., eliminating abstruse warnings) facilitates justice rather than impeding it. As observed by Rogers, Hazelwood, et al. (in press), the prosecution benefits as warnings become closer to "air-tight" in their use of clear and unequivocal language. Convictions overturned because of inadequate Miranda warnings frustrate the goals of the prosecution.

As the first step in community consultation, psychologists are asked to obtain copies of Miranda warnings from nearby counties. Word processing programs (e.g., Microsoft Word and WordPerfect) provide quantified data, such as word counts and Flesch-Kincaid reading levels. Psychologists with forensic backgrounds have an advantage in knowing key members of the legal community. Psychologists without forensic backgrounds have an advantage because they are disinterested (impartial) professionals that have no financial stake in the modification of Miranda warnings.

Forensic Practice and Miranda Issues

Ryba, Brodsky, and Shlosberg (2007) found that approximately one fourth of forensic psychologists were involved in Miranda-waiver evaluations, with an unknown percentage of nonforensic psychologists participating in these consultations. Previously presented estimates suggest that more psychologists are likely needed with specialized training in Miranda issues and Miranda waiver evaluations.

Traditional models for the assessment of Miranda waivers emphasized cognitive and developmental issues in line with Grisso's (1981) pioneering work with juvenile offenders. This approach is also reflected in contemporaneous practices (see Ryba et al., 2007, p. 306, Table 3) in which psychological measures are predominantly used to evaluate intelligence, achievement, and reading. In contrast, only 10% of the practitioners involved in Miranda work use measures of psychopathology.⁵

Recent investigations underscore the importance of broadening forensic evaluations of Miranda waivers to include Axis I disorders and overall impairment. Cooper, Zapf, and Griffin (2003) suggested the importance of combining both cognitive impairment and psychological symptoms in determinations of Miranda-related abilities. Focusing on the Miranda comprehension abilities of mentally disordered defendants, Rogers, Harrison, Hazelwood, and Sewell (2007) found that psychological impairment played a major role in Miranda comprehension. Oral administrations of Miranda warnings are especially affected because of the additional demands on concentration and comprehension (Rogers, 2008). Beyond comprehension per se, individuals with psychotic disorders are likely to have impaired reasoning (Redlich, 2005), which is especially relevant to the intelligent prong of Miranda waivers. Extrapolating from competency research, Rogers, Tillbrook, and Sewell (2004, Table 6.12) found that defendants with impaired rational abilities had markedly higher levels (Cohen's d = 2.98) of psychotic symptoms than those without such impairment.

Rogers and Shuman (2005) provided an assessment model for Miranda waiver evaluations that addresses both cognitive and psychological domains. It integrates both standardized methods and case-specific approaches and provides general guidelines. A challenging component is evaluating the effects of acute intoxication. Substanceabusing suspects are often very poor historians and have difficulty providing an accurate account of either their substance use or their pre-interrogation (i.e., questioning before Miranda warnings). A common issue is temporal discounting; the suspect simply wants to get the process over with irrespective of the costs. For example, Sigurdsson and Gudjonsson (1994) found that 60% of suspects were partly motivated by the hope that they could go home if they "cooperated" with the interrogation and confessed. For evaluations of impaired reasoning, the objective (i.e., just going home) may be reasonable for drug possession but not for capital murder.

Miranda waiver evaluations are sometimes complicated by a protracted interval of months between the waiver and its evaluation. Practitioners need to educate legal professionals, especially defense counsel, regarding the perils of postponing these consultations. Seminal work by Grisso (1981) documented modest gains in juveniles' Miranda understanding even after a several-day interval. Despite being collected on different samples, data in Table 1 suggest the possibility of improvements after the immediate effects of arrest and detention have transpired. Delayed Miranda waiver evaluations invite criticisms because of

⁵ It is unclear from the survey results whether psychologists were asked to include their use of Axis I interviews, which would provide useful data about severe psychopathology.

their retrospective nature. Especially in those common cases of intoxication coupled with Axis I disorders and cognitive impairment, the ability to reconstruct the suspect's functioning to the specific moments preceding the Miranda waiver becomes increasingly challenging with the passage of time. Consequently, practitioners are less able to be definitive in their conclusions. Fortunately, this problem is largely preventable. Depending on resources, suspects can be screened and subsequently evaluated on Miranda issues within days of their arrest.

Participation in Miranda Research

The development of specialized Miranda measures represents a high priority for forensic research based on the prevalence of failed Miranda comprehension and the farreaching consequences of such determinations. According to Ryba et al. (2007), the majority of forensic psychologists conducting Miranda waiver evaluations do not use specialized forensic measures. In addressing this need, Rogers (2008) invited researchers to collaborate on a new generation of Miranda measures.

Our programmatic research on Miranda warnings (Rogers, Harrison, Hazelwood, & Sewell, 2007; Rogers, Harrison, Shuman, et al., 2007; Rogers et al., 2008) has produced three research measures that address Miranda warning vocabulary, comprehension, and reasoning. For vocabulary, Grisso's (1981, 1998) important work with six difficult words from Miranda warnings underscored how the correct meaning of words was essential to Miranda warning comprehension. The Miranda Vocabulary Scale (MVS; Rogers, 2006b) was initially developed by compiling words pertinent to Miranda warnings from the first major survey of 560 jurisdictions (Rogers, Harrison, Shuman, et al., 2007). The initial version of the MVS included 10 frequently used (> 200 warnings) Miranda terms, which ranged from easy words (e.g., lawyer) to those which are substantially more complex (e.g., waive and coercion). The remaining 40 words were divided into 12 infrequent terms $(\leq 10 \text{ warnings})$ and 28 midrange terms (averaging 45.0 warnings), selected because of their relevance to Miranda understanding. The rationale for infrequent words was their potential impact; although the term "exercise" was used in only four jurisdictions, its misapprehension could still affect hundreds of custodial suspects each year.

The heterogeneity of Miranda warnings stymies any attempt to generalize from any single jurisdiction to most other jurisdictions. The Miranda Statements Scale (MSS; Rogers, 2005) used prototypical Miranda components to develop representative Miranda warnings. First, 783 individual components from 560 Miranda warnings were disaggregated and formed into five categories based on Flesch-Kincaid reading levels (i.e., < 6, 6 to 7.9, 8 to 9.9, 10 to 11.9, and \ge 12). Three dually trained (PhD. and JD.) legal experts with in-depth knowledge of Miranda issues

independently selected the two most representative Miranda components at each grade category. With further refinement, a high level of concordance (98.0%) was achieved. The two comparable versions were constructed, each with high levels of interrater reliability (mean kappa > .85).

The Miranda Rights Scale (MRS; Rogers, 2006a) is a 15-item research scale that evaluates the possible advantages and disadvantages for exercising or waiving Miranda rights. Consistent with *Iowa v. Tovar* (2004), custodial suspects must be aware of their options and their likely consequences. Its present scoring is based on content analysis, which demonstrated good interrater reliability for its individual items (mean kappa = .84). A new scoring system is being implemented that considers different levels of reasoning: long-term consequences, immediate consequences (i.e., pre-interrogation), and impaired reasoning (e.g., delusional thinking).

Beyond Miranda measures, research must evaluate the temporal stability of Miranda capacities, which considers the consistency of measured abilities over time. If performance on Miranda measures varies considerably across administrations, then researchers and practitioners can have little confidence in their accuracy. For the Miranda measures, the highest stability is hypothesized for the MVS because vocabulary is an important aspect of crystallized intelligence. In contrast, reasoning abilities on the MRS are likely to be more vulnerable to psychological states and situational stresses and, therefore, to be less stable across time.

Because evaluations are often conducted weeks after the Miranda waiver, research must consider the accuracy of such retrospective appraisals. A weakness of available Miranda studies is their focus exclusively on current functioning. I reviewed (Rogers, 2002) available designs for retrospective appraisals including the corroborative (i.e., independent sources) and analogue (e.g., mock crime scenarios) models. For corroborative models, independent verification of knowledge is not feasible because most suspects claim to "understand" irrespective of their comprehension levels. Likewise, analogue models fail to capture both the psychological characteristics of typical offenders and the situational demands of arrest and detention. Therefore, I proposed the time-lapse model for retrospective assessment with two phases: (a) First, abilities are assessed for the current time, and (b) second, abilities are retrospectively assessed for the same period as the first phase. For Miranda studies, detainees will be assessed shortly after their arrests. The time-lapse follow-up evaluates the retrospective appraisal of Miranda warning understanding. In contrast, temporal-stability follow-up (i.e., both administrations for the current time) assesses the stability of Miranda comprehension abilities across time.

Major advances in Miranda assessments are strongly anticipated in the next decade in both scale development

and retrospective validation via time-lapse designs. Beyond general English warnings, additional work is needed on Miranda measures for different populations (e.g., juvenile offenders), translations, and special modes of communication (e.g., sign language).

Concluding Remarks

Knowledge and meta-knowledge represent different levels of understanding of Miranda issues. Knowing little but believing strongly may well be a deadly combination for custodial suspects making life-altering decisions. Likewise, experts' sciolism can also have fatal consequences. For instance, the failure to raise legitimate Miranda issues at trial can doom defendants at the postconviction phase.

Alexander Pope in the same stanza about the dangers of a little learning added the following: "While from the bounded level of our mind, Short views we take, nor see the lengths behind." This couplet captures the dangers of Miranda knowledge when preconceived notions and short-sighted perspectives prevent suspects and professionals alike from understanding the full ramifications of Miranda warnings and the validity of their waivers.

Author's Note

The Miranda research was supported by Grants 0418057 and 0615934 from the Law and Social Sciences Program of the National Science Foundation to Richard Rogers (principal investigator). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation.

Full disclosure of interest: Richard Rogers has developed three Miranda measures (the Miranda Vocabulary Scale, the Miranda Rights Scale, and the Miranda Statements Scale) described in this article. They do not have any commercial value, but this could possibly change in ensuing years.

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